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Filed: October 19, 2000
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REMARKS

Objections

The Patent Office has objected to Claims 3, 12, 14, and 24 under 37 C.F.R. 1.75(c).
Claims 3 and 14 have been canceled.

Regarding Claims 12 and 24, the Patent Office asserts that "to be a seam less embossing surface, the material must be applied to a roller, therefore Claim 12 is superfluous and Claim 24 does not fall within the seamless embodiments." Applicant respectfully disagrees.

Page 13, lines 13-16 of the specification disclosure provides that "[W]hile a rotating cylinder 3 has been used for coating 4, other shapes of embossing surfaces can also be used. For example, a flat surface can be used with a platen moved in two directions, or even a platen that moves in one direction while the source of the EMF radiation is also moving in one or more directions." Therefore, it is respectfully requested that the Patent Office withdraw its objections to Claims 12 and 24.

Rejections

35 U.S.C. §112, first paragraph

The Patent Office has rejected Claims 1-6, 8-19, 22-24 and 28-30 under 35 U.S.C. §112, first paragraph, because allegedly the "specification, while being enabling for rollers or cylinders, does not reasonably provide enablement for other stamper shapes" and the Patent Office asserts that "the specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to practice the invention commensurate in scope with these claims." The Patent Office further asserts that the "specification points to seamless cylinders or rollers (5/10-11 and 3/10-4/2), therefore the claims should include this limitation." Applicant respectfully disagrees.

All questions of enablement are evaluated against the claimed subject matter. The focus of the examination inquiry is whether everything within the scope of the claim is enabled. The

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Federal Circuit has repeatedly held that "the specification must teach those skilled in the art how to make and use the full scope of the claimed invention without 'undue experimentation'."¹ Nevertheless, not everything necessary to practice the invention need be disclosed. In fact, what is well known is best omitted.² All that is necessary is that one skilled in the art be able to practice the claimed invention, given the level of knowledge and skill in the art. Further, the scope of enablement must only bear a "reasonable correlation" to the scope of the claims.³ As concerns the breadth of a claim relevant to enablement, the only relevant concern should be whether the scope of enablement provided to one skilled in the art by the disclosure is commensurate with the scope of protection sought by the claims.⁴

Referring to page 13, lines 13-16 and page 19, line 9 of the specification, Applicant points out that various shapes of the embossing surfaces, such as rollers, stampers, are known, so one skilled in the art would recognize how to make and use the full scope of the claimed invention without 'undue experimentation'. For example, it is easy to imagine an embossing surface being a flat surface, and a surface to be embossed being a roller. The data would be transferred from the flat embossing surface to the roller by pressing the roller against the embossing surface, creating a seamless embossing surface consistent with the subject matter claimed in Claims 1-6, 8-19, 22-24 and 28-30.

Therefore, Applicant respectfully asserts that various shapes of the embossing surface in Claims 1-6, 8-19, 22-24 and 28-30 enable rollers and other stamper shapes. Applicant respectfully requests that Claims 1-6, 8-19, 22-24 and 28-30 be allowed.

35 U.S.C. §112, second paragraph

The Patent Office rejected Claims 26, 28 and 29 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Claim 26 has been amended to place it in condition for allowance.

¹ *In re Wright*, 999 F.2d 1557, 1556, 27 USPQ2d 1510, 1513 (Fed. Cir. 1993).

² *In re Buchner*, 929 F.2d 660, 661, 18 USPQ2d 1331, 1332 (Fed. Cir. 1991).

³ *In re Fisher*, 427 F.2d 833, 839, 166 USPQ 18, 24 (CCPA 1970).

⁴ *In re Moore*, 439 F.2d 1232, 1236, 169 USPQ 236, 239 (CCPA 1971), MPEP 2164.08.

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Regarding Claims 28 and 29, the Patent Office asserts that the term "applying" should be replaced with the term "contacting". Applicant respectfully disagrees.

Applicant respectfully asserts that the step of "applying" is well supported and refers the Patent Office to page 14, lines 1-8 and page 20, lines 3-9 of Applicant's specification. Applicant respectfully asserts that Claims 28 and 29 are in condition for allowance.

35 U.S.C. §103 Rejections

35 U.S.C. §103(a)

1. The Patent Office has rejected Claims 1-3, 5 and 6 under 35 U.S.C. §103(a) over U.S. Patent No. 5,521,030 to McGrew ("McGrew") in view of IBM Technical Disclosure Bulletin Vol. 30(3) pp. 1392-1393 (08/1987) ("IBM disclosure"). Applicant respectfully disagrees.

For an obviousness rejection to be proper, the Patent Office must meet the burden of establishing a prima facie case of obviousness. In accordance with the holding in In re Lee, the the Patent Office must contain provide evidentiary finding of a suggestion, teaching or motivation for one of ordinary skill in the art to modify or combined references to come up with the claimed invention.⁵ Under In re Lee, the motivation to combine references must be explicitly found in the references, and the so-called common knowledge is not a substitute for evidentiary findings.

Applicant respectfully asserts that the obviousness rejection articulated by the Patent Office is based on a misinterpretation of the teachings of McGrew. In column 4, lines 26-38 and column 3, lines 57-62 McGrew is describing a "transfer layer 16", which is "a photoresist which adheres well to chrome or hardened steel", where "AZ 1350 positive photoresist is a suitable photoresist for use as transfer layer 16" and "the transfer layer 16 may be a malleable or deformable layer such as wax, plastic or other polymer, or other malleable material." The transfer surface of McGrew is not an embossing surface claimed in Claim 1. In column 3, lines 45-47, the embossing surface of McGrew is described as a smooth surface region on a substrate

⁵ *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996); *In re Sang Su Lee*, 277 F.3d 1338, 61 USPQ2d 1430 (Fed. Cir. 2002).

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which is a "hardened-steel block having a smooth surface region 14 formed in the steel by precision grinding and polishing." The transfer layer of McGrew is merely used to transfer the pattern into the smooth surface region by anisotropic etch until the transfer layer is entirely removed (column 4, line 57 to column 5, line 4). Therefore, McGrew does not disclose, teach or suggest a seamless embossing surface consisting of a photodefined positive tone polyimide material.

Referring now to the IBM disclosure nowhere in that disclosure could a teaching or a suggestion of a "seamless embossing surface configured for transferring data to other surfaces, said embossing surface consisting of a photodefined positive tone polyimide material" be found, as claimed by Claim 1. To the contrary, the IBM disclosure teaches away from a "wet development" process as claimed in Claim 2. To support this assertion, Applicant refers the Patent Office to lines 21-23 of the IBM disclosure which states "[A] technique is described that eliminates "wet" processing, provides a wider process window, and allows good control over modulation".

Applicant respectfully asserts that the Patent Office has not satisfied its burden of providing an evidentiary showing of a suggestion, teaching or motivation for one of ordinary skill in the art to modify McGrew, the IBM disclosure or the combination thereof. If the Patent Office disagrees, it is respectfully asked to provide the column/line numbers in the McGrew patent and IBM disclosure where the teaching or motivation to combine resulting in the claimed invention could be found, as required under In re Lee. Applicant argues that Claims 1 and 2 are non-obvious over McGrew in view of the IBM disclosure and, therefore, allowable. Claims 2, 3, 5 and 6 depend from Claim 1, and are therefore also allowable. Allowance of these Claims is requested.

2. The Patent Office rejected Claims 1-3, 5-6, 10-17, 22 and 28-29 under 35 U.S.C. §103(a) over U.S. Patent No. 5,279,689 to Shvartsman ("Shvartsman") in view of McGrew, IBM Technical Disclosure Bulletin Vol. 30(3) pp. 1392-1393 (08/1987) and Japanese Patent No. 08-039572 to Kataoka et al. ("Kataoka"). Applicant respectfully disagrees.

Applicant has reviewed the cited publications and could not find anywhere in either Shvartsman or Kataoka a teaching of "embossing surface consisting of a photodefined positive

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tone polyimide material", as claimed in Claim 1. In column 8, line 56 to column 9, line 21 and column 9, lines 22-55, Shvartsman discloses a photohardenable film which is embossed using a stamper, wherein the "stamper is then pressed into the photohardenable surface by a mechanical or hydraulic press." The abstract of Kataoka discloses that a "photosensitive polyimide 3 is applied" to the surface of a heat insulating layer and that by "exposing ultraviolet rays under the condition that a grain-like masking film 4 is put on the surface of the photosensitive polyimide and dissolving the un-exposed portion with solvent, a heat insulating layer covered mold having the grain-like surface is formed", wherein the surface is used for injection purposes. Nowhere in the Kataoka disclosure a teaching or suggestion of a photosensitive polyimide surface hardened into an embossing surface could be found. Similarly, no disclosure or suggestion of an aqueously developable surface could be found. Finally, Applicant respectfully asserts that the Patent Office has provided no evidentiary showing of a suggestion, teaching or motivation for one of ordinary skill in the art to modify Shvartsman, Kataoka or McGrew or to combine them to come up with the present invention as claimed in 1-3, 5-6, 10-17, 22 and 28-29. If the Patent Office disagrees, it is respectfully asked to provide the column/line numbers in the McGrew, Kataoka and Shvartsman patents where the teaching or motivation to combine resulting in the claimed invention could be found, as required under In re Lee.

Applicant respectfully asserts that the Patent Office has not satisfied its burden of establishing a prima facie case under 35 USC 103(a) with regard to Claims 1, 10, 28 and 29. Claims 1, 10, 28 and 29 are therefore allowable. Claims 2, 3, 5 and 6 depend from Claim 1 and are allowable. Claims 11-17 and 22 depend from allowable Claim 10 and are allowable. Allowance of the Claims is requested.

3. The Patent Office has rejected Claims 1-3, 5-6, 8-19, 22 and 28-29 under 35 U.S.C. §103(a) over Shvartsman in view of McGrew, IBM Technical Disclosure Bulletin Vol. 30(3) pp. 1392-1393 (08/1987) and Kataoka and further in view of Japanese Patent JP 01-142077 and/or U.S. Patent No. 5,149,607 to De Graaf et al. ("De Graaf"). Applicant respectfully disagrees.

Consistently with the discussion and argument presented above, nowhere in the Kataoka disclosure a teaching or suggestion of a photosensitive polyimide surface which is hardened into an embossing surface could be found. Similarly, no disclosure or suggestion of an aqueously

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developable surface could be found. No suggestion, teaching or motivation for one of ordinary skill in the art to modify Shvartsman, Kataoka or McGrew or to combine the teachings of Shvartsman, Kataoka or McGrew was found as well. Moreover, a disclosure of an embossing surface could be found neither in JP 01-142077 or De Graaf. Referring to the abstract of JP 01-142077, it can be seen that JP 01-142077 discloses "forming an electrically conductive thin film having satisfactory corrosion resistance on the recording surface of the stamper", which is not the same as a seamless embossing surface claimed in Claim 1. Also, Example II and page 5, lines 29-36 of De Graaf discloses a "resultant matrix employed as a die in an injection molding process for molding synthetic resin information disks" with no mention of an embossing surface.

Therefore, Applicant respectfully asserts that the Patent Office has not satisfied its burden of providing an evidentiary showing of a suggestion, teaching or motivation for one of ordinary skill in the art to modify Shvartsman, Kataoka, McGrew, the IBM disclosure, JP 01-142077 or De Graaf or the combination thereof. If the Patent Office disagrees, it is respectfully asked to provide the column/line numbers in the McGrew, Kataoka, JP 01-142077, De Graaf and Shvartsman patents, as well as the IBM disclosure, where the teaching or motivation to combine resulting in the claimed invention could be found, as required under In re Lee. Applicant argues that Claims 1, 10, 28 and 29 are allowable. Claims 2, 3, 5 and 6 depend from Claim 1, and are therefore also allowable. Claims 11-17 and 22 depend from Claim 10 and are allowable. Allowance of these Claims is requested.

4. The Patent Office rejected Claims 1-6, 8-19, 22, 23 and 28-29 under 35 U.S.C. §103(a) over Shvartsman in view of McGrew, IBM Technical Disclosure Bulletin Vol. 30(3) pp. 1392-1393 (08/1987) and Kataoka and further in view of Japanese Patent JP 01-142077 and/or De Graaf and U.S. Patent No. 5,452,282 to Abraham ("Abraham"). Applicant respectfully disagrees.

After a review of Abraham, Applicant's attorney has been unable to locate any teaching or suggestion of a "seamless embossing surface" consisting of "a photodefined positive tone polyimide material", as well as stamper from a polyimide material, as claimed in Claim 1. Furthermore, similarly to the argument provided above, the IBM disclosure, and the Kataoka, Shvartsman and JP 01-142077 patents, Applicant respectfully asserts that the disclosure,

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teaching or suggestion of an aqueously developable photosensitive polyimide surface which is hardened into a seamless embossing surface could be found nowhere in those publications.

Therefore, Applicant respectfully asserts that the Patent Office has not satisfied its burden of providing an evidentiary showing of a suggestion, teaching or motivation for one of ordinary skill in the art to modify Abraham, Shvartsman, Kataoka, McGrew, the IBM disclosure, JP 01-142077 or De Graaf or the combination thereof. If the Patent Office disagrees, it is respectfully asked to provide the column/line numbers in the Abraham, McGrew, Kataoka, JP 01-142077, De Graaf and Shvartsman patents, as well as the IBM disclosure, where the teaching or motivation to combine resulting in the claimed invention could be found, as required under In re Lee. Applicant argues that Claims 1-6, 8-19, 22, 23 and 28-29 are allowable. Allowance of these Claims is requested.

5. The Patent Office has rejected Claims 1-6, 10-17, 22 and 28-30 under 35 U.S.C. §103(a) over either U.S. Patent No. 5,104,768 to Sassmannshausen et al. ("Sassmannshausen") or to U.S. Patent No. 4,927,736 to Mueller et al. ("Mueller") in view of European Patent No. EP 0766142 to Fan et al. ("Fan") and McGrew. Applicant respectfully disagrees.

Column 1, lines 11-14 of Sassmannshausen discloses that that "term 'photoresists' is usually applied to photostructurable organic polymers which are used in photolithographic processes and related techniques such as the production of printing plates." Column 12, lines 25- 26 of Mueller discloses that "the resists of this invention may be used in the preparation of printing plates." Additionally, page 2, lines 11-12 and page 4, lines 20-25 of Fan discloses "a seamless relief printing sleeve" which are "well known for use in printing, particularly on surfaces which are soft and easily deformable." Thus, it should be readily apparent that neither Sassmannshausen, Mueller or Fan discloses, teaches or suggests a "seamless embossing surface configured for transferring data to other surfaces, said embossing surface consisting of a photodefined positive tone polyimide material", as claimed in Claim 1. Moreover, upon review of the cited references, Applicant's attorney was unable to find any suggestion, teaching or motivation for one of ordinary skill in the art to modify, either singly or in combination, the references of Sassmannshausen, Mueller, Fan or McGrew.

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Therefore, Applicant respectfully asserts that the Patent Office has not satisfied its burden of providing an evidentiary showing of a suggestion, teaching or motivation for one of ordinary skill in the art to modify Sassmannshausen or Mueller in view of Fan and McGrew, as required under In re Lee. Thus, the Patent Office has not satisfied its burden of establishing a prima facie case of obviousness of Claims 1-6, 10-17, 22 and 28-30, which are therefore allowable. Claims 2-6 depend from allowable Claim 1, Claims 11-17 and 22 depend from allowable Claim 10, Claim 30 depends from allowable Claim 29 and are, therefore allowable. Allowance of these Claims is respectfully requested.

6. The Patent Office rejected Claim 26 under 35 U.S.C. §103(a) over Shvartsman in view of Kataoka and Sassmannshausen and further in view of U.S. Patent No. 6,324,329 to Muzino et al. ("Muzino") and IBM Technical Disclosure Bulletin Vol. 30(3) pp. 1392-1393 (08/1987). Applicant respectfully disagrees.

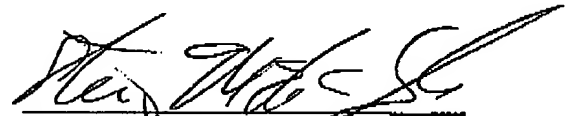
Upon review of Shvartsman, Kataoka, Sassmannshausen, Muzino and the IBM disclosure Applicant's attorney has been unable to locate any suggestion, teaching or motivation for one of ordinary skill in the art to modify, either singly or in combination, the references of Shvartsman, Kataoka, Sassmannshausen, Muzino and the IBM disclosure to come up with the present invention as claimed in amended Claim 26. Allowance of Claim 26 is respectfully requested.

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CONCLUSION

In accordance with 37 CFR 1.21 (c)(1)(ii) a marked-up version of the amended claims is attached as Appendix A. Applicant believes that this application is in condition for allowance and respectfully requests the allowance of the case. Applicant's Attorney request that the Patent Office call Applicant's Attorney to facilitate allowance of this case.

Respectfully submitted,



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APPENDIX A

MARKED-UP VERSION

Please cancel Claims 3 and 14 and amend Claim 26 as shown in marked-up form below:

26. (Thrice Amended) A method of transferring data from a first surface to other surfaces via a transfer medium comprising a polyimide material, said method comprising the steps of:

- (a) casting said transfer medium on a surface containing said data, wherein said casting includes separating said transfer medium from said surface containing said data such that said transfer medium includes said data; and,
- (b) using said transfer medium to transfer said data to said other surfaces.

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